

Tolerably Good Top Slate,			
Top Bench of good Coal,		4' 10''	} 6' 1½''
Slate,	6''		
Bottom Bench of Rough Coal,		9½''	

The above is a section of the two beds of Coal in the Lackawanna Coal Basin, $1\frac{1}{2}$ miles west from Scranton, furnished by the boss miner to P. W. Sheafer, March 11, 1857. Opened by two drifts on the South bank of the Lackawanna, where the Coal dips about 5° West.

These Coal were known as the 9 and 11 foot beds.

Stated Meeting, April 16, 1869.

Present, seventeen members.

Dr. GEORGE B. WOOD, President, in the Chair.

A letter accepting membership was received from J. C. Mill, dated Blackheath Park, March 22, 1869.

Letters acknowledging the receipt of diplomas of membership were received from John Tyndall, dated London, March 20th, and from H. A. Newton, dated Yale College, March 2d, 1869.

Donations for the Library were received from the Royal Academy and Observatory at Turin, the Geological Society and M. Bossange at Paris, the R. Astronomical Society and Mr. Quaritch at London, the Royal Society at Edinburgh, the Portland Society of Natural History, the Rev. J. B. Perry, the Essex Institute and Cambridge Museum, the editors of the Journal of Medical Sciences, Dr. Isaac Lea, J. B. Lippincott & Co., and the Fairmount Park Commissioners of Philadelphia.

Professor Spencer F. Baird, of Washington, was appointed to prepare an obituary notice of the late member, John Cassin, of Philadelphia.

The Committee to which was referred additions to the Memoir of Professor Cope, reported in favor of publication.

Professor Cresson introduced the subject of the brilliant Aurora Borealis of the preceding evening, which Dr. Emerson, Mr. Price, and Mr. Chase described as seen by them.

Mr. Lesley said that it was so brilliant and roseate at Washington, D. C., that the fire engines were taken out; that it did not invade the southern half of the heavens to any extent; but that he observed a brightly illuminated feather, 30° or 40° in length from east to west, float slowly west-north-westward, some little distance south of the zenith, gradually expanding its dimensions but scarcely changing its form, during half an hour. Its head or eastern point was, when first seen, say 40° east of the meridian, and at the end of half an hour, quite that distance west of the meridian. It was evidently an electrified cirrus cloud, and could no doubt have been watched until it sank to the horizon, but for the fact that it passed lengthwise directly under the moon, then about four days old, and very bright. Castor and Pollux shone brightly through it, as it passed beneath them. At one time an auroral feather shot from its northern edge and streamed along westward, nearly parallel with its northern edge, continuing brilliant about twenty seconds. Soon after, an electric spot glowed suddenly in its centre for about the same length of time. With these exceptions, it appeared steadily and uniformly illuminated. Mr. Lesley compared it with the triple curtain aurora which he saw July 23d, 1862, on the banks of the Gulf of St. Lawrence, and described in the Proceedings of the Society, Vol. IX, page 60.

Dr. Emerson called the attention of the Society to the Robins' process for preserving wood from mould and decay by the injection of the vapors of coal tar. Professor Cresson explained the difference between this and other processes for attaining the same end; especially one now in use in Philadelphia, in which the spontaneous inflammability of wood injected with high volatile hydrocarbons is guarded against by a subsequent injection of the surface with silicates.

Nominations Nos. 622 and 626 were read and spoken to. At the request of the recommenders, nomination No. 626, after being discussed, was postponed, for the purpose of affording an opportunity for associating with it other names mentioned in the discussion. Nos. 622 to 625 were then balloted for.

The Rittenhouse Clock. The curators were authorized to have it put in complete order, although it is no longer fit to use for astronomical purposes.

The following named persons were declared duly elected members of the Society:

D. G. Brinton, M. D., of Philadelphia.

A. D. White, President Cornell University, Ithaca, N. Y.

J. H. C. Coffin, U. S. N., Supt. Naut. Almanac, Washington, D. C.

Joseph Wharton, of Philadelphia.

And the Society was adjourned.

Stated Meeting, May 7, 1869.

Present, nine members.

JOHN C. CRESSON, Vice-President, in the Chair.

Dr. Brinton was introduced to the presiding officer, and took his seat.

Letters accepting membership were received from J. H. C. Coffin, dated Nautical Almanac Office, Washington, April 21, 1869; D. G. Brinton, dated 1001 North Sixth street, Philadelphia, April 19, 1869; A. Carlier, dated 6 rue de Milan, Paris, Avril 19, 1869, and D. White, dated Cornell University, Ithaca, N. Y., May 1.

Donations for the Library were received from the Royal Academies and Societies at St. Petersburg, Berlin, Copenhagen, Göttingen, Munich, and Dublin; the Societies of Science at Offenbach, Frankfort, Bordeaux, Manchester and Leeds; the Geological Societies at Vienna, and Geographical Societies at London and Paris, the Zoological Botanical Society at Vienna, the London Astronomical, Chemical, Meteorological and Asiatic Societies, the Boston Natural Historical Society and Wool Manufacturers Association, the American Pharmaceutical Society, Academy of Natural Sciences, Franklin Institute, House of Refuge, Deaf and Dumb Institute, Dr. C. D. Meigs, the United States Sanitary Commission, the Congressional Library, and Mr. T. B. Brooks, Civil Engineer at Negaunee, Michigan.

Dr. Hayden presented, for publication in the Transactions, an Appendix to his report of the Geology on the Yellow and Missouri Rivers, under the superintendence of Captain Ray-